FY 2015 Traditional Section 6 Grant Program
PRIORITY LIST OF PROJECT TOPICS

PLANTS

***Black lace cactus*:**

- Develop a habitat model based on known natural locations serving to focus systematic surveys for previously undetected locations.
- Demographic monitoring of known populations to document population trends, including assessments of mortality, recruitment, and dispersal.
- Clarify the phylogenetic relationship of black-lace cactus with all other known members of the *E. reichenbachii-fitchii* species complex (approximately 10 infra-taxa).

***Texas golden gladecress*:**

- Extensive, systematic surveys (using TPWD Rare Plant Survey Form) for both extant and to search for previously undetected populations, to include associated species.

INVERTEBRATES

***Tawny crazy ant*:**

- Impact on natural communities, listed species, and species of concern, particularly in karst
- Detection and potential control mechanisms.

***American burying beetle*:**

- Evaluation of species distribution and population status in northeastern Texas.

West Texas aquatic invertebrates: Phantom springsnail, Phantom tryonia, diminutive amphipod, Diamond tryonia, Gonzales tryonia, and Pecos amphipod.

- Proposals on the development of captive propagation techniques and methodologies for establishing refugia populations of these species at appropriate holding facilities.

***Federally listed west Texas spring-dependent invertebrates*:**

- Assessment of currently known spring sites and habitat within the known historical range for the potential creation of new habitats which may be suitable for habitat expansion for these species, especially for species that are single site endemics.

***Mussels* :**

- Salina mucket, Texas hornshell, Mexican fawnsfoot, Texas fawnsfoot, Smooth pimpleback, Golden orb, Texas pimpleback, Texas fatmucket, Texas pigtoe, Triangle pigtoe, Southern hickorynut, Louisiana pigtoe, Sandbank pocketbook, Texas heelsplitter, and False Spike.
  - Research to fill the science needs: genetics, current distribution and abundance, hydraulic habitat, fish host relationships, low flow water quality requirements, environmental contaminant effects, relocation best practices.
- Zebra mussel distribution, ecology, and impacts on freshwater mussels.

FISH

Smalleye and sharpnose shiner (in upper Brazos River basin):

- Assess vulnerabilities and threats from saltcedar encroachment and effects on instream habitat and hydrology.
- Habitat fragmentation (physical and hydrologic barriers to movement) and relationship to reproductive success.

Devils River minnow *(*in Devils River basin):

- Research on relationships among groundwater withdrawals, spring discharge, and habitat quality and availability.

American Eel (in Sabine River basin):

- Information on distribution and abundance to inform management, conservation, and potential listing.

Blue sucker (in Rio Grande River):

- Recruitment dynamics with implications for range-wide management and conservation in Texas.

Any west Texas spring-dependent freshwater fish listed (State and/or Federal) or proposed for listing:

- Assessment of currently known spring sites and habitat within the known historical range for the potential creation of new habitats, which may be suitable for habitat expansion for these species, especially for species that are single site endemics.

AMPHIBIANS AND REPTILES

***Black-spotted newt*:**

- Assess geographic distribution, habitat requirements, and population status.

***Spot-tailed earless lizard*:**

- Assess connectivity and gene flow among populations (northern and southern forms).

***Houston toad*:**

- Continued surveys and implementation of head-starting and/or captive propagation program to augment existing populations or to establish new populations in designated priority areas.

BIRDS

***Red-cockaded Woodpecker*:**

- Habitat enhancement and management projects where this species exists in Texas.

***Red-crowned Parrot*:**

- Population trend and conservation threat assessment.

***Whooping Crane*:**

- Conduct facilitated Population Viability Analysis workshop to assist in updating recovery goals.

***Red Knots and Piping Plovers*:**

- Comparison of effects of various beach maintenance programs, beach nourishment, and human activities on shorebird use of the Gulf beach (measured by birds' abundance, distribution, and prey availability).

MAMMALS

Tri-colored bat

- Assess status, distribution, and habitat use.